Royal Berkshire NHS Foundation Trust

Rotator cuff repair advice and exercises

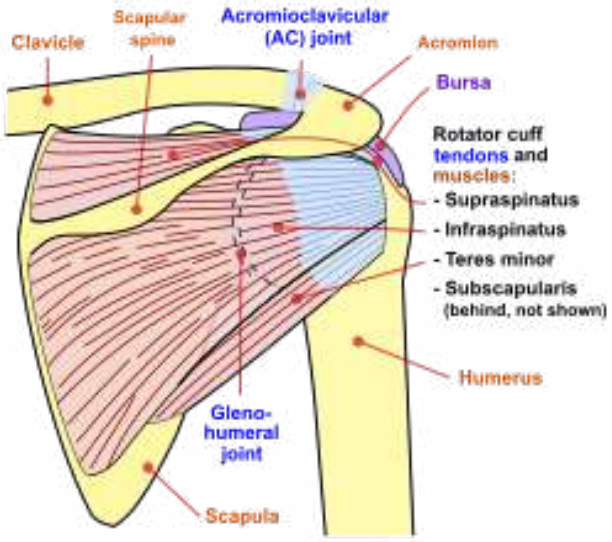
This advice is for patients who have had rotator cuff repair surgery. This information is designed to help you get back to full fitness as quickly as possible after your operation.

Before you leave hospital a physiotherapist will teach you all the exercises on this leaflet and make sure that you do not have any problems.

Why do I need this operation?

The rotator cuff consists of four muscles and their tendons, which surround the ball of the shoulder joint (humeral head). The muscles fine-tune the movements of the shoulder and help keep the ball of the shoulder joint in its socket.

The tendons of the rotator cuff pass through a narrow space between the top of the arm bone and a prominent bone on the shoulder blade (the acromion). The cuff is very vulnerable to being pinched here when the arm is moved, especially above the head. Over time this pinching can lead to tears. The chances of this happening increases with age.



Shoulder anatomy image from Wikimedia Commons

When repeated stress occurs, the integrity of the cuff becomes weakened and loses its quality and elasticity. This often leads to pain, which can be severe. This contributes to weakness of the shoulder, and occasionally, you may also experience clicking.

Other forms of treatment such as injection and physiotherapy are available but sometimes the best option is to consider surgery. The effectiveness of this surgery is very individual. It can depend upon the size of the tear, the quality of the tendons and associated lifestyle factors of the patient.

What is rotator cuff repair?

The operation usually involves three incisions (portals), one at the front, one at the side and one at the back. The damaged tendon is repaired by stitching it to the bone. The arm is then placed in a sling before you leave the operating theatre. The surgery is carried out under a general anaesthetic, but does not usually require an overnight stay in the hospital.

Follow up

You will be expected to attend the 11am shoulder group at the Royal Berkshire Hospital on the first Friday following your surgery; this is for a wound check and to make sure you are comfortable and understand your exercises. Following this, a referral will then be forwarded to your local physiotherapy department for further rehabilitation, but when this commences will depend on the size of the tear.

You will be also be reviewed in the shoulder (orthopaedic) clinic three months after your surgery.

General guidelines

Pain: A nerve block may be used during the procedure, which means that immediately after the operation your shoulder and arm can feel numb for a few hours. The shoulder will be sore when this wears off and this may last for a few weeks. It is important that you continue to take your painkillers. Ice packs may also help reduce pain. Wrap frozen peas / crushed ice in a damp, cold towel and then place on your shoulder for up to 10 minutes. Allow at least 20 minutes between each application of the ice pack.

Wearing a sling: You will return from theatre wearing a sling. Depending on the size of the repair, the sling is worn for a minimum of three weeks and up to a maximum of six weeks. The sling needs to be worn both day and night, so initially you will only remove the sling for specific exercises and to wash / dress. It can be worn over the top of clothing to allow you to dress normally. Your physiotherapist will advise you on how to loosen the sling for the exercises and the easiest way to self-care.

Hygiene: You are likely to need assistance to wash and dress, so it is advisable to try to organise some help from family and friends prior to admission. The easiest way to self-care will be shown to you in the post-op shoulder group.

The wound

- Most rotator cuff repairs are performed arthroscopically (keyhole), through several 5mm incisions (portals). There will be no stitches, only small sticking plaster strips over the wounds. These should be kept dry until healed (usually between 5 to 7 days).

If the wound changes in appearance, weeps fluid or pus or you feel unwell with a high temperature, contact your GP as soon as possible as you may have an infection.

How long will healing take?

This depends on the size of the tear, the quality of the remaining tendon and the time you have to immobilise the shoulder in the sling.

At three months after your surgery, your symptoms will likely have improved, but not fully resolved. It might take up to 6 months after your surgery to regain considerable strength in your shoulder and your symptoms will likely be around 80% better at this stage. At 6 months you should have regained almost full range of movement, although there will probably still be discomfort when moving your arm overhead.

Exercises

Before starting any activity / exercise it is important to position your shoulders in a relaxed, neutral position. This allows normal shoulder function. Before starting any exercise, gently move your shoulder blades down and in towards the spine, but not in a braced (forced) back position.

Throughout your rehabilitation you must always be guided by your pain and it is highly likely you will find you are more tired than usual initially. It is important to ensure you adopt a sensible balance between activity and rest.

Do not force, stretch or stress the repair by forcing the shoulder into positions of high resistance or pain.

Try to do the exercises little and often spread throughout the day, as you are likely to find this easier and more tolerable than sustained (long) exercise sessions, e.g. x 5-10 reps of an exercise. Try to ensure you do all the (appropriate) exercises at least a few times a day.

Perseverance is key, rehabilitation after a rotator cuff repair usually takes between 6-12 months but in some cases it may take longer. We understand this may sounds like a long time, but your physiotherapist can explain why this is a normal expectation.

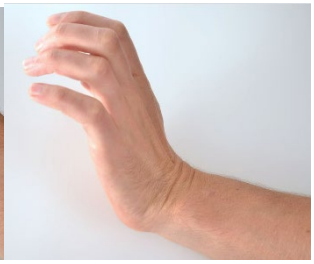
Day 0-3 weeks (all repairs)

Postural awareness:

- Standing or sitting –
  Pull the shoulder blades gently back and down, with the chest bone (sternum) naturally coming forwards, as if taking a deep breath in.

Elbow exercises:

- Standing –
  Bend and straighten the elbow fully, using your good arm to assist if needed.
- Standing or sitting –
  With a bent elbow turn the forearm over in a clockwise and anti-clockwise direction (palm up, then palm down).

<table>
<tr><td></td><td> </td></tr>
<tr><td>Wrist and hand exercises:
Bend the wrist forwards and backwards, then side to side.
Circle the wrist in a clockwise and then in an anticlockwise direction.
Squeeze and make a fist. You can use a small ball if you have one.</td><td>  </td></tr>
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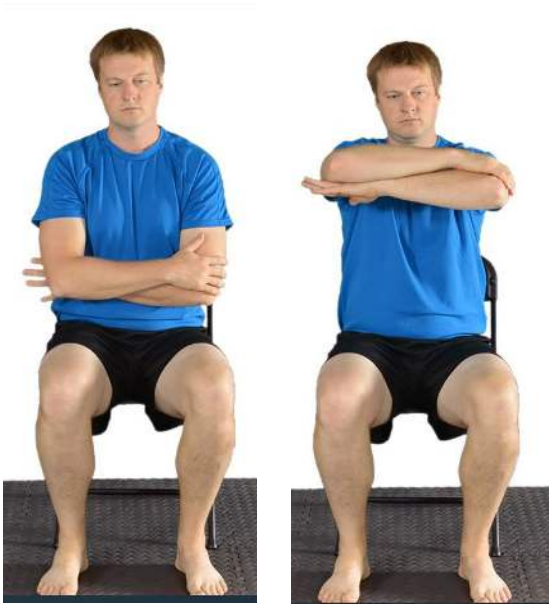
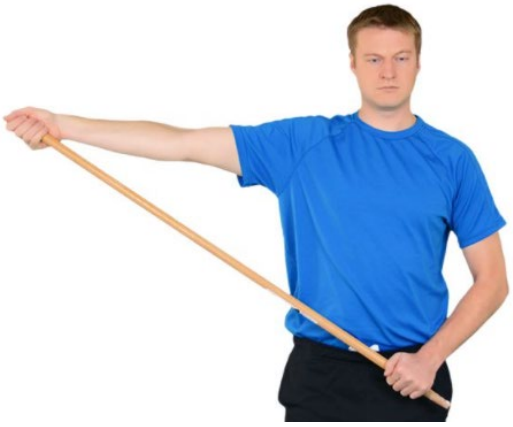
Day 0-3 weeks (small/ moderate tears only)

• Sitting or standing – Use the good arm to support the operated arm and gently lift the operated arm up away from the body (if done properly, you won't be able to go very far).	
• Standing – Keep both elbows tucked into your waist and hold a stick (palms upwards) in both hands. • Slowly use the good hand to push the hand and forearm of the operated side away from the body. • Ensure the elbow does not come away from the waist.	
• Standing – Holding a stick in both hands; slowly use the good hand to push the operated arm out to the side and away from the body. • Don't worry if you can't go very far to start with.	

From 3 weeks (small/ moderate tears only) or 5-6 weeks (large/massive tears)

- Lying on your back –
  Gently raise your operated arm up and over your head, using your good arm to assist / support as needed.
- To start with, it may be more comfortable to do this with a bent elbow.

- Sitting at a table –
  Put a cloth or small ball underneath the operated arm (hand).
- Gently slide the operated arm away from the body, using the ball to take some weight of the arm and lean your body forward into the table.

- Standing –
  Holding a stick in both hands; slowly use the good hand to push the operated arm out to the side and away from the body.
- Slowly encourage the arm to go all the way up.

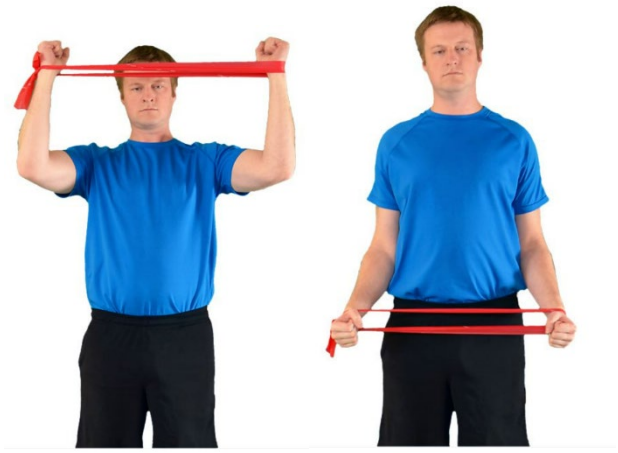
• Standing – Keep both elbows tucked into your waist and hold a stick (palms upwards) in both hands. • Slowly use the good hand to push the hand and forearm of the operated side away from the body. • Ensure the elbow does not come away from the waist. • This is the same exercise you did previously, but we are now going to start pushing a bit further.	
• Lying on your (non-operated side) – Slowly start to reach your operated arm away from your body (elbow straight, arm out in front). • Make sure to keep your arm horizontal, take it up towards your head, then down to your feet, ensuring the arm does not drop towards the floor. • Alternatively, roll it on a gym ball up and down. • Note: for this exercise, you don't have to use a ball if you don't have one.	
• Standing – Arm at your side, elbow bent to 90 degrees. • Stand with your back to the wall and push your elbow backwards against the doorframe.	

- Standing –
  Arm at your side, elbow bent to 90 degrees.
- Stand next to the wall and push your hand against the doorframe as if you are turning the arm outwards.

From 6 weeks (small/moderate tears) or 12 weeks (large/massive tears)

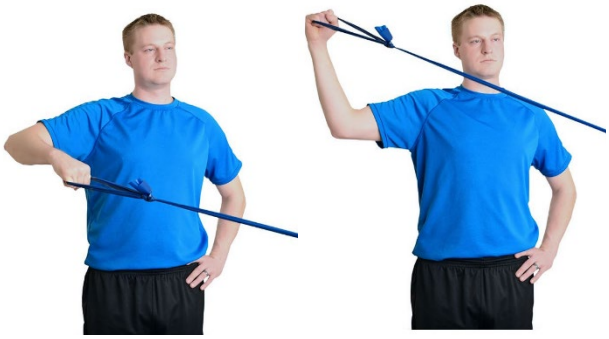
- Standing facing a wall –
  Pushing your forearms into the wall at all times, slowly slide your hands upwards in a ‘Y’ shape direction

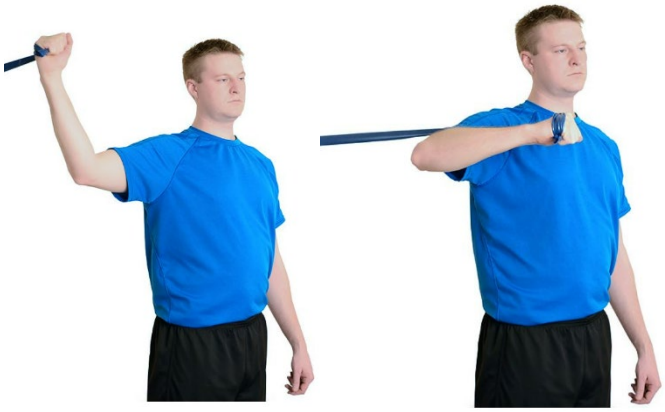
- Standing –
  Lift the operated arm upwards to a vertical position.

• Standing – Lift the arms away from the body and out to the side, going as far as you can. • Try to gently increase how far the arm goes, every time you do the exercise (go further with practice).	
• Standing – Hold a light resistance band around both of your hands/wrists. • Pulling your hands apart so the band is tight, lift your arm up towards the ceiling keeping the tension through the band at all times.	
• Standing – Hold a resistance band in both hands in an outstretched position. • Pull the band tight with both arms and then squat down. • Repeat the squats, keeping the tension on the band throughout.	

• Standing – Place both hands on a table or kitchen work surface and gently lean onto the hands, putting weight through both arms. • Slowly increase the amount of weight through the arms as able, but avoid bending the elbows or leaning your body towards the surface.	
• Lying on your back – With a medicine ball in the operated hand, try to push it up towards the ceiling and back down. The challenge is to keep it controlled and as centred (balanced) as possible. • The slower you go, the harder it is.	

Harder exercises

• Standing – Tie a resistance band to a static (stable) object at one end and hold the band in the operated hand at the other end. • Start with your elbow bent, arm out to the side at shoulder height and forearm parallel to the floor. Slowly rotate your hand / forearm backwards, and up towards the ceiling (pulling against the band as you do). • Return to the starting position.	

• Standing – Tie a resistance band to a static (stable) object at one end and hold the band in the operated hand at the other end. • Start with your elbow bent, arm out to the side at shoulder height and forearm pointing up towards the ceiling. • Slowly rotate your hand/ forearm down towards the floor (pulling against the band as you do). • Return to starting position.	
• Standing – Lift your operated arm straight in front of you to shoulder height. • Roll a ball in different directions along the wall.	
• Standing – Place both hands on a cushion/ pillow or a wobble cushion, either keeling on the floor, or standing at a kitchen work surface/ table. Lean onto your hands, putting weight through both arms. • If this is easy, try balancing through only the operated arm (lift the good arm off the surface) and lean your body over the cushion. • The more uneven or 'wobbly' the surface you are leaning through, the harder it is.	
• Kneeling on the floor – Keeping your knees bent and on the floor, try to do a press up (bend both elbows). Go as far as comfortable, and slowly increase the depth as able.	

• Kneeling on the floor – Slowly lift one arm off the floor up in front of you and then straighten the opposite leg out behind you. • (Don't lift the arm and leg on the same side, it should always be the opposites!)	
• Standing – Facing a table or kitchen worktop, reach both hands as far as you can away from your body. Keeping your hands in the same place, slowly walk your feet backwards and bend at your hips.	

Images courtesy of http://simpleset.net

Resuming normal activities

Timings for returning to functional activities are approximate and will differ depending upon the individual. However, the earliest that these activities may commence are:

	Small / medium tears	**Large tears**
Driving	6 weeks	8 weeks
Swimming: Breast stroke Freestyle	 6 weeks 3 months	 12 weeks May not regain
Golf	3 months	3 months
Contact sport	Guided by consultant	Guided by consultant
Return to work: Desk jobs Manual work	 6 weeks Guided by consultant	 8 weeks Guided by consultant

Note: These are guidelines only. Please ask your physiotherapist or consultant for individual advice.

Contact us

Physiotherapy Outpatient Department Physiotherapy East tel: 0118 322 7811
For questions or concerns please contact:
Catherine Anderson – Advanced Physiotherapy Practitioner, catherine.anderson@royalberkshire.nhs.uk
Kris Einarsson-Hoare – Advanced Physiotherapy Practitioner, kristian.einarsson-hoare@royalberkshire.nhs.uk
Daniel Wiltshire – Specialist Physiotherapist, daniel.wiltshire@royalberkshire.nhs.uk

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

RBFT Physiotherapy Department.
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